### Kathleen Truesdell

From: Gregory Darvin <a href="mailto:darvin@atmosphericdynamics.com">darvin@atmosphericdynamics.com</a>

Sent: Thursday, October 14, 2010 4:33 PM

**To:** Kathleen Truesdell

**Subject:** RE: OGS - Auxiliary Boiler Startup, Shutdown, and Commissioning Emission

Jim states the tuning emissions would be similar to commissioning rather than startup/shutdown lb/hr.

## Gregory Darvín

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From: Kathleen Truesdell [mailto:ktruesdell@baaqmd.gov]

Sent: Thursday, October 14, 2010 3:49 PM

To: Gregory Darvin

Subject: RE: OGS - Auxiliary Boiler Startup, Shutdown, and Commissioning Emission

Greg,

Can we assume the startup/shutdown lb/hr rate would be the same for tuning as required in BAAQMD Reg. 9-7?

Thanks, Kathleen

**From:** Gregory Darvin [mailto:darvin@atmosphericdynamics.com]

Sent: Tuesday, June 22, 2010 10:32 AM

To: Kathleen Truesdell

Subject: RE: OGS - Auxiliary Boiler Startup, Shutdown, and Commissioning Emission

Hi Kathleen. We would prefer that the normal operational emissions from the aux boiler be the only limits and the information provided below to be used more for informational purposes. Our thoughts is that the boiler, with CEMs, will be tracking the emissions continuously to ensure that the PWL of 100 tpy is not exceeded.

If you need to establish startup limits, then the emissions provided would be our proposed limits.

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From: Kathleen Truesdell [mailto:ktruesdell@baagmd.gov]

Sent: Tuesday, June 22, 2010 10:16 AM

To: Gregory Darvin

Subject: RE: OGS - Auxiliary Boiler Startup, Shutdown, and Commissioning Emission

Hi Greg,

Are the provided emissions and times OGS proposed limits? If not, please provide the limits.

#### Thanks, Kathleen

----Original Message-----

From: Gregory Darvin [mailto:darvin@atmosphericdynamics.com]

Sent: Tuesday, June 22, 2010 10:11 AM

To: Kathleen Truesdell

Subject: OGS - Auxiliary Boiler Startup, Shutdown, and Commissioning Emission

Hi Kathleen.

Attached is our estimate of the startup, shutdown, and commissioning emissions for the auxiliary boiler. If we eliminate the 20% margin on the auxiliary operating hours, we can accommodate the additional startup and shutdown emissions and not exceed our previously calculated annual emissions. We had included the 20% margin to allow overlap of the operation of the auxiliary boiler and combustion turbines. In other words, we assumed that the auxiliary boiler would run for 120% of the hours that the combustion turbines were both offline. This was an extremely conservative assumption in that we likely won't need to start up the auxiliary boiler until a while after both combustion turbines are shutdown (this is because of the stored thermal energy in the HRSGs).

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